

Please replace the paragraph beginning at page 3, line 1, with the following rewritten paragraph:

B¹
cond. --In the above described two-leg walking robot, three rotation drive cables (U phase, V phase, and W phase), four rotation position sensor cables (A phase, B phase, and Z phase), and one ABS position serial signal cable, that is, a total of seven cables are required, thereby causing the problem of a complicated configuration containing a larger number of wires for the entire robot--

Please replace the heading at page 3, line 8, with the following rewritten heading:

B² --Summary of the Invention--

Please replace the paragraph beginning at page 7, line 19, with the following rewritten paragraph:

B³ --Figs. 4(A) and 4(B) are a front view and a side view respectively, showing the configuration of the thigh joint mechanism.--

Please replace the paragraph beginning at page 7, line 21, with the following rewritten paragraph:

B⁴ --Figs. 5(A) and 5(B) are a front view and oblique view, respectively, showing the configuration of the thigh joint mechanism.--

Please replace the paragraph beginning at page 7, line 23, with the following rewritten paragraph:

B⁵ --Figs. 6(A), 6(B) and 6(C) are a side view, a front view and a side view, respectively, showing the configuration of the ankle joint mechanism.--

Please replace the paragraph beginning at page 8, line 7, with the following rewritten paragraph:

B⁶

--Figs. 10(A), 10(B) and 10(C) show the outline of the configuration of the rotor and the rotor axis magnetic pole angle sensor.--

\ Please replace the paragraph beginning at page 8, line 11, with the following rewritten paragraph:

B⁷

--Figs. 12(A), 12(B) and 12(C) show the outline of the configuration of a stator and a power substrate.--

\ Please replace the paragraph beginning at page 8, line 13, with the following rewritten paragraph:

B⁸

--Figs. 13(A), 13(B) and 13(C) show the outline of the configuration of a torque amplification unit.--

Please replace the paragraph beginning at page 8, line 20, with the following rewritten paragraph:

B⁹

--Figs. 16(A) and 16(B) are plan views showing the outline of the configuration of the control substrate.--

\ Please replace the paragraph beginning at page 9, line 9, with the following rewritten paragraph:

B¹⁰

--Fig. 23 is a block diagram showing the connection relationship between each motor of the conventional robot--

^ Please replace the paragraph beginning at page 11, line 19, with the following rewritten paragraph:

B¹¹ --Figs. 4(A), 4(B), 5(A) and 5(C) show the configuration of the thigh joint mechanism 36 of the robot 10, and Figs. 6(A), 6(B) and 6(C) show the configuration of the ankle joint mechanism 43.--

\ Please replace the paragraph beginning at page 11, line 22, with the following rewritten paragraph:

B¹² --As shown in Figs. 4(A), 4(B), 5(A) and 5(B), the motor M-9 is fixed to the hip base 21 at the lower portion of the belly unit in the thigh joint mechanism 36. The output axis of the motor M-10 is connected to the output axis of the motor M-9 through a U-shaped connection material 50, and a U-shaped material 51 is fixed to the side of the motor M-10.--

In the Claims:

Please amend Claim 1 as follows:

- C¹
B¹³
1. (Amended) A joint control apparatus for controlling the movement of a robot joint, which includes a first link and a second link where the first link is rotated about a predetermined axis with torque generated by the apparatus, said apparatus comprising:
- an actuator;
 - electric current detection means included in said actuator for detecting a drive current of the actuator;
 - torque detection means included in said actuator for detecting the amount of torque based on the drive current detected by said electric detection means; and